

# Drinking Water Supply Recommendations for Protection

All items presented in the following table are provided as **recommendations** for the protection of drinking water supplies. It is assumed that Zone III, the protection area furthest from the intake, should have, at a minimum, the basic protection afforded under existing statutes and regulations. Obviously, any protection already afforded by law should also apply to Zones II and I. However, protection efforts in Zone III may be increased through stepped-up or targeted surveillance and enforcement, as initiated or championed by local stakeholders, such as the public water system, water customers, the Water Management Council, etc. Moving downstream, closer to the intake, protection recommendations become more conservative. Protection recommendations presented below for Zones II and I are designed to offer greater control of land use activities and minimize the occurrence of contaminants or contaminant sources in the supply protection area; these zones also provide for greater response preparedness should a spill or other event occur that might threaten the water supply. Because many protection options are very site-specific and this document could not contain every possible option, phone numbers or web sites are provided for more detailed information. Where applicable, specific references to regulations or statutes are provided.

NPS Contaminant Sources	Zone I Drinking Water Protection Areas (Maximum Protection Recommendations)	Zone II Drinking Water Protection Areas (Moderate Protection Recommendations)	Zone III Drinking Water Protection Areas (Minimum Protection Recommendations)	References / Comments
AGRICULTURE	<p>Monitor annually to ensure compliance with Agriculture Water Quality Act (AWQA). 1/</p> <p>Encourage implementation of voluntary Best Management Practices (BMPs) above the minimum required by the AWQA. BMP manuals for specific types of operations are available. 1/</p> <p>Monitor annually to ensure implementation of Nutrient Management Plans (NMPs). 2/</p> <p>Encourage development and Implementation of Resource Management System (RMS) on agricultural operations per USDA-Natural Resource Conservation Service (NRCS) specifications. 3/</p> <p>No storage or use of pesticides.</p>	<p>Ensure compliance with AWQA. 1/</p> <p>Encourage implementation of voluntary BMPs above the minimum required by the AWQA. BMP manuals for specific types of operations are available. 1/</p> <p>Monitor implementation of NMPs. 2/</p> <p>Minimize pesticide use and storage. Optimize integrated pest management practices. Restrict use of pesticides that have high-moderate potential to leach into surface or groundwater. 3/</p>	<p>Encourage compliance with AWQA. 1/</p> <p>Encourage implementation of NMPs. 2/</p> <p>Encourage pesticide application according to label. Application other than according to label is unlawful. 3/</p>	<p>1/ AWQA is required by law. Refer to local USDA-NRCS &amp;/or Cooperative Extension Service office. For more information refer to links under “Agriculture” topic on the website: <a href="http://water.nr.state.ky.us/nps/nps_links.htm">http://water.nr.state.ky.us/nps/nps_links.htm</a></p> <p>2/ Required by AWQA. More strenuous NMPs are a requirement for participation in most federal and state agricultural cost-share programs. See local USDA-NRCS office for more information.</p> <p>3/ Refer to KY Department of Agriculture-Pesticide Branch at 502-564-7274</p>
SILVICULTURE	<p>Monitor to ensure compliance with Forestry Conservation Act. 1/</p> <p>Require BMP implementation per the Forest Landowners Handbook. 2/</p> <p>Consider expanding riparian protection zone requirements through local ordinances.</p> <p>No use of herbicides.</p>	<p>Ensure compliance with Forest Conservation Act. 1/</p> <p>Encourage Promote BMP implementation per the Forest Landowners Handbook. 2/</p>	<p>Encourage compliance with Forestry Conservation Act. 1/</p> <p>Encourage implementation of voluntary BMPs per the Forest Landowners Handbook. 2/</p>	<p>1/ Compliance with Forestry Conservation Act required by law. Refer to KY Division of Forestry (502-564-4496) or . to website: <a href="http://www.environment.ky.gov/nrepc/dnr/forestry/conservation.asp">http://www.environment.ky.gov/nrepc/dnr/forestry/conservation.asp</a></p> <p>2/Available Summer 2003. Refer to DOW-NPS section for more information.</p>

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<b>CONSTRUCTION</b>	<p>Monitor and ensure compliance with erosion and sediment control plans per KPDES requirements for sites 5 acres or larger. (1 acre or larger as of March 2003). 1/</p> <p>Require low impact development BMPs. 2/</p> <p>Change local ordinances to allow and require low impact development. See sample ordinances at <a href="http://www.stormwatercenter.net/">http://www.stormwatercenter.net/</a></p>	<p>Encourage compliance with erosion and sediment control plans per KPDES permit requirements for sites 5 acres or larger. (1 acre or larger as of March 2003). 1/</p> <p>Encourage the use of low impact development BMPs. Conduct review of ordinances to facilitate implementation. See worksheet at <a href="http://www.cwp.org/COW_worksheet.htm">http://www.cwp.org/COW_worksheet.htm</a> 2/</p>	<p>Encourage compliance with erosion and sediment control plans per KPDES requirements for sites 5 acres or larger. (1 acre or larger as of March 2003). 1/</p> <p>Encourage the use of low impact development BMPs. 2/</p>	<p>1/ Refer to DOW-KPDES Branch for more information (telephone: 502-564-3410). For general information on construction BMPs, refer to DOW website: <a href="http://water.nr.state.ky.us/dw/Tips/BMPs.htm">http://water.nr.state.ky.us/dw/Tips/BMPs.htm</a>.</p> <p>2/ Refer to DOW-NPS web page under topics of “Construction” and “Urban” for links to “smart growth” or “low impact development” websites. <a href="http://water.nr.state.ky.us/nps/NPS_Home.htm">http://water.nr.state.ky.us/nps/NPS_Home.htm</a></p>
<b>URBAN RUNOFF/STORM SEWERS</b>	<p>Permitted areas: Monitor biannually to ensure compliance with KPDES Stormwater permits and plans. 1/</p> <p>Permitted and non-permitted areas: Require adoption of stormwater and low –impact development BMPs. 2/</p> <p>Change local ordinances to allow and require low impact development. See sample ordinances at <a href="http://www.stormwatercenter.net/">http://www.stormwatercenter.net/</a></p>	<p>Permitted areas: Ensure compliance with KPDES Stormwater permits and plans. 1/</p> <p>Permitted and non-permitted areas: Encourage adoption of stormwater and low –impact development BMPs. Conduct review of ordinances to facilitate implementation. See worksheet at <a href="http://www.cwp.org/COW_worksheet.htm">http://www.cwp.org/COW_worksheet.htm</a> 2/</p>	<p>Permitted areas: Encourage compliance with KPDES Stormwater permits and plans. 1/</p> <p>Permitted and non-permitted areas: Encourage adoption of stormwater and low – impact development BMPs. 2/</p>	<p>1/ Refer to DOW KPDES Branch.</p> <p>2/ Refer to DOW-NPS web page under topics of “Construction” and “Urban” for links to “smart growth” or “low impact development” websites. <a href="http://water.nr.state.ky.us/nps/NPS_Home.htm">http://water.nr.state.ky.us/nps/NPS_Home.htm</a></p>
<b>ABANDONED MINE SITES</b>  <b>OIL &amp; GAS ACTIVITIES (Resource extraction)</b>	<p>No resource extraction activities (mining, oil and gas, pits, etc.)</p> <p>Require mitigation &amp;/or remediation of impacts of pre-SMACRA activities. 1/</p> <p>Petition for declaration of “lands unsuitable for mining” under 405 KAR 24:020-24:030</p>	<p>Require BMPs be utilized to maximum extent for all permitted activities. Monitor annually to ensure compliance. 1/</p>	<p>Encourage compliance with all applicable mineral extraction permitting requirements. 1/</p>	<p>Refer to KY Div. of Surface Mining, Reclamation and Enforcement (DSMRE)-Division of Abandoned Mine Lands (AML)</p>
<b>ONSITE/DE-CENTRALIZED/ SEPTIC SYSTEMS, STRAIGHT PIPES</b>	<p>Eliminate and prevent new straight pipes and failing septic systems.</p> <p>Prepare and implement Groundwater Protection Plan;conduct monitoring activities to assess effectiveness.</p>	<p>Eliminate straight pipes and failing septic systems.</p> <p>Prepare and implement Groundwater Protection Plan 1/</p> <p>Connect properties with failing onsite systems to sanitary sewers where feasible.</p>	<p>Eliminate straight pipes and failing septic systems.</p> <p>Prepare Groundwater Protection Plan. 1/</p> <p>Connect properties</p>	<p>1/ Required by law. See KY DEP Environmental Permitting Programs document at DEP website <a href="http://www.kyenvironment.org/nrepc/dep/permitting.pdf">http://www.kyenvironment.org/nrepc/dep/permitting.pdf</a> or call the KY DEP at (502) 564-2150.</p> <p>2/ Maintain/operate systems in accordance with manufacturer’s specifications, and/or industry standards.</p>

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	<p>Connect properties with failing onsite systems to sanitary sewers where feasible. 1/</p> <p>Ensure proper maintenance/operation of systems. 2/, 3/</p> <p>Replace failing onsite systems with systems that are most appropriate/protective of the environment. 3/, 4/</p> <p>Reduce generation of wastewater. 5/</p> <p>Conduct education and training for local officials, contractors and/or the general public regarding onsite wastewater issues. 4/, 5/</p> <p>Adopt region or county-wide sanitation district for planning and management wastewater.</p> <p>No new on-site wastewater systems.</p>	<p>1/</p> <p>Ensure proper maintenance/operation of systems. 2/, 3/</p> <p>Replace failing onsite systems with systems that are most appropriate/protective of the environment. 3/, 4/</p> <p>Encourage region- or county-wide sanitation district for planning and management of wastewater.</p> <p>Require advanced treatment for new on-site wastewater systems.</p>	<p>with failing onsite systems to sanitary sewers where feasible. 1/</p> <p>Ensure proper maintenance/operation of systems. 2/, 3/</p>	<p>3/ Refer to EPA publication Onsite Wastewater Treatment Systems Manual (Feb 2002) document EPA/625/R-00/008. Can be ordered by calling 1-800-490-9198, or can be viewed online at <a href="http://www.epa.gov/ORD/NRMRL/Pubs/625R00008/625R00008.htm">http://www.epa.gov/ORD/NRMRL/Pubs/625R00008/625R00008.htm</a></p> <p>4/ Consult with the Kentucky Onsite Wastewater Association regarding available onsite systems and technologies. Call (502) 839-5802 or see website at <a href="http://www.kentuckyonsite.org">www.kentuckyonsite.org</a>.</p> <p>5/ Consult with KY DEP (<a href="http://www.kyenvironment.org/nrepc/dep/dep2.htm">http://www.kyenvironment.org/nrepc/dep/dep2.htm</a>, (502) 564-2150) and/or KY Pollution Prevention Center (<a href="http://www.kppc.org/">http://www.kppc.org/</a>, (800) 334-8635 ext. 0965)</p>
<b>PERMITTED WASTEWATER POINT SOURCES</b>	<p>Eliminate permitted sewage systems (such as package treatment plants) with a history of noncompliance with permit requirements.</p> <p>Review existing sewage systems biannually to ensure compliance with all applicable DEP permitting requirements. 1/</p> <p>Monitor systems biannually to ensure proper ongoing maintenance and operation. 2/</p> <p>Seek regionalization of all wastewater discharges or elimination of other discharges to eliminate point sources, to the extent possible (if they exist).</p> <p>Discourage or ban any new</p>	<p>Bring permitted sewage systems (such as package treatment plants) with a history of noncompliance in compliance with permit requirements. 1/</p> <p>Review annually to ensure sewage system compliance with all applicable DEP permitting requirements. 1/</p> <p>Monitor annually to ensure proper ongoing maintenance and operation of systems. 2/</p> <p>Seek regionalization of all wastewater discharges to eliminate wastewater discharges – especially from small package plants.</p>	<p>Bring permitted sewage systems (such as package treatment plants) with a history of noncompliance in compliance with permit requirements. 1/</p> <p>Review periodically to ensure sewage systems are in compliance with all applicable DEP permitting requirements. 1/</p> <p>Monitor periodically to ensure proper ongoing maintenance and operation of systems. 2/</p>	<p>1/ Required by law. See KY DEP Environmental Permitting Programs document at DEP website <a href="http://www.kyenvironment.org/nrepc/dep/permitting.pdf">http://www.kyenvironment.org/nrepc/dep/permitting.pdf</a> or call the KY DEP at (502) 564-2150.</p> <p>2/ Maintain/operate systems in accordance with manufacturer’s specifications, and/or industry standards.</p>

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	wastewater point source discharges.		Encourage regionalization of all wastewater discharges.	
<b>LANDFILLS, DUMPS, LANDFARMS</b>	<p>No new permitted landfills or landfarms.</p> <p>Review existing operations biannually to ensure compliance with all applicable DEP permitting requirements (e.g., KPDES, Groundwater Protection Plans, Solid Waste Landfills, etc.). 1/</p> <p>Cleanup all dumps.</p>	<p>Only allow construction and demolition landfills of less than one acre, with clay liner, under PE supervision (outside the WHPA, none is required). 1/</p> <p>Review existing operations annually to ensure compliance with all applicable DEP permitting requirements (e.g., KPDES, Groundwater Protection Plans, Solid Waste Landfills, etc.). 2/</p> <p>Cleanup all dumps.</p>	<p>Review periodically to ensure existing operations are in compliance with all applicable DEP permitting requirements (e.g., KPDES, Groundwater Protection Plans, Solid Waste Landfills, etc.). 1/</p> <p>Cleanup all dumps.</p>	<p>1/ 401 KAR 48:310 defines standards for construction and demolition debris landfills in wellhead protection areas.</p> <p>2/ Required by law. See KY DEP Environmental Permitting Programs document at DEP website <a href="http://www.kyenvironment.org/nrepc/dep/permitting.pdf">http://www.kyenvironment.org/nrepc/dep/permitting.pdf</a> or call the KY DEP at (502) 564-2150.</p>
<b>HYDRO-MODIFICATION</b> (Channelization, Dredging, Dam Construction, Upstream Impoundment, Flow Regulation/Modification)	<p>Restrict or prohibit hydromodification activities.</p> <p>Utilize natural channel design principals.</p>	<p>Monitor to ensure Water Quality Certification and Corps of Engineers 404 permit compliance. 1/</p> <p>Restore existing hydromodification impacts following natural channel design principals.</p> <p>Provide educational and training opportunities to better understand the affects of hyrdomodification activities on aquatic environments.</p>	<p>Ensure Water Quality Certification and Corps of Engineers 404 permit for hydromodification activities. 1/</p> <p>Encourage restoration of existing hyrdomodification impacts following natural channel design principals.</p> <p>Support educational and training opportunities to better understand the affects of hyrdomodification activities on aquatic environments.</p>	<p>1/ Refer to DOW-Water Quality Certification Section. Water Quality Certification only applies to in-stream or wetland activities. <a href="http://water.nr.state.ky.us/dow/dwwqc.htm">http://water.nr.state.ky.us/dow/dwwqc.htm</a></p>
<b>HABITAT MODIFICATION</b> (other than hydro-modification) Removal of Riparian Vegetation Streambank Modification/Destabilization Drainage/Filling of Wetlands	<p>Restrict or prohibit habitat modification activities.</p> <p>Utilize natural channel design principals.</p> <p>Ensure vegetated riparian buffer areas exist and are protected and maintained to at least 300 feet width. 2/</p>	<p>Review to ensure Water Quality Certification compliance. 1/</p> <p>Restore existing habitat alteration impacts following natural channel design principals.</p> <p>Provide educational and training opportunities to better understand the affects of habitat modification on aquatic environments.</p>	<p>Ensure Water Quality Certification for habitat modification activities. 1/</p> <p>Encourage restoration of existing habitat modification impacts following natural channel design principals. – need</p>	<p>1/ Refer to DOW-Water Quality Certification Section. Water Quality Certification only applies to in-stream or wetland activities. <a href="http://water.nr.state.ky.us/dow/dwwqc.htm">http://water.nr.state.ky.us/dow/dwwqc.htm</a></p> <p>2/ Buffer widths given are based on best levels of protections. For specifications on appropriate riparian buffer zones for your situation, refer to links under topic of “Riparian Zone” on website: <a href="http://water.nr.state.ky.us/nps/nps_links.htm">http://water.nr.state.ky.us/nps/nps_links.htm</a> .</p>

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		Ensure vegetated riparian buffer areas exist and are protected and maintained to at least 200 feet width. 2/	reference here  Support educational and training opportunities to better understand the affects of habitat modification on aquatic environments.  Ensure vegetated riparian buffer areas of 100 feet width exist and are protected and maintained. 2/	
<b>MARINAS AND RECREATIONAL BOATING, PORTS</b>  In-water Releases On-land Releases	No marinas or ports.  Restrict boats to non-motorized varieties.	Review annually to ensure marinas and ports comply with applicable regulatory authorities. Ensure facility is following a Spill Prevention Plan. 1/  Provide and require use of pump out service for houseboats and others equipped with toilet facilities.  All fuel, chemical and waste storage facilities are to be located on land at least 200 feet from shore.	Monitor marinas and ports for compliance with applicable regulatory authorities. 1/  Provide and require use of pump out service for houseboats and others equipped with toilet facilities.  All fuel, chemical and waste storage facilities are to be located on land.	/1 Refer to KY Fish and Wildlife. Additional information is available at <a href="http://www.epa.gov/owow/nps/mmmsp/index.html">http://www.epa.gov/owow/nps/mmmsp/index.html</a> or <a href="http://www.epa.gov/owow/nps/marinas/">http://www.epa.gov/owow/nps/marinas/</a>
<b>RECREATIONAL AND TOURISM ACTIVITIES</b> (Non-boating)  Golf Courses Parks	Restrict application and storage of pesticide and soil amendments. 1/  Utilize appropriate devices or methods to capture and treat runoff. Utilize low impact development BMPs. 2/  Restrict land use from development under local planning and zoning rules, and limit to low-impact recreational and tourism activities.	Monitor annually to ensure minimal storage and use of pesticide and soil amendments according to the label, as required by law. 1/  Encourage utilization of appropriate devices or methods to capture and treat runoff. Encourage use of low impact development BMPs. 2/	Encourage appropriate storage and use of pesticide and soil amendments according to the label, as required by law. 1/  Encourage utilization of appropriate devices or methods to capture and treat runoff. Encourage use of low impact development BMPs. 2/	1/ Refer to KY Department of Agriculture-Pesticide Branch  2/ Refer to DOW-NPS web page under topics of “Construction” and “Urban” for links to “smart growth” or “low impact development” websites. <a href="http://water.nr.state.ky.us/nps/NPS_Home.htm">http://water.nr.state.ky.us/nps/NPS_Home.htm</a>
<b>EROSION FROM DERELICT LAND</b>	Require establishment of permanent vegetative cover. . 1/	Encourage establishment of permanent vegetative. 1/	Encourage establishment of	1/ Refer to local USDA-NRCS office.

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(bare soil)			permanent vegetative cover. 1/	
<b>WASTE STORAGE TANKS / STORAGE TANK LEAKS</b> Petroleum/chemical  (Above ground) (Underground)	Remove existing and prevent new installation of above- or underground waste storage tanks.	Annually review compliance records of existing above or underground storage tanks. Ensure that permitted tanks are in compliance with current regulations. Encourage non-permitted tanks to utilize best available technology to prevent or contain spills or leaks.  Monitor annually to ensure a spill prevention plan is on place and is being followed for all above-ground tanks.	Ensure that tanks are in compliance with current regulations and that a spill prevention plan is being followed.	
<b>WASTE TREATMENT, STORAGE, or DISPOSAL (TSD) ACTIVITIES</b>	Remove and prevent development of new permitted waste TSD activities.			
<b>HIGHWAY MAINTENANCE AND RUNOFF</b>	Require the adoption and application of highway maintenance and runoff BMPs 1/  Limit highway construction or avoid waterways. Modify designs to limit runoff, especially drain-spouts on bridges to minimize salt de-icing runoff to waterways.  Post signs indicating present of source water protection area on major roads.  Evaluate and consider detention basins at new bridges at high-traffic/threat crossing to contain spills.	Ensure the adoption and application of highway maintenance and runoff BMPs 1/  Encourage posting of signs indicating present of source water protection area on major roads.	Encourage the adoption and application of highway maintenance and runoff BMPs. 1/	1/ Refer to the following links to websites or publications on controlling highway runoff:  - Highway runoff threats: <a href="http://www.tfhr.gov/hnr20/runoff/runoff.htm">http://www.tfhr.gov/hnr20/runoff/runoff.htm</a> - Eight tools of watershed protection: <a href="http://www.stormwatercenter.net/Slideshows/8tools%20for%20smrc/sld001.htm">http://www.stormwatercenter.net/Slideshows/8tools%20for%20smrc/sld001.htm</a> - Roadside use of native plants: <a href="http://www.fhwa.dot.gov/environment/rdsduse/rd_use13.htm">http://www.fhwa.dot.gov/environment/rdsduse/rd_use13.htm</a>
<b>SPILLS</b>	Require all spills to be reported, regardless of quantity.  Pass local ordinance to require SPCC plans for non-“oil” facilities that pose threat to the water supply. 2/  Pass local ordinance to require specific steps in SPCC specially suited to local situation.	Require a mandatory pollution prevention plan for all sites handling chemicals/wastes.  Review water system’s emergency response plan and tailor it to ensure conformity with Local Emergency Mgt. Plan 3/	Take appropriate remedial measures 1/  Ensure all required facilities have Spill Prevention Control and Countermeasures Plans (SPCC) in place 2/  Ensure community has Local Emergency Management Plan 3/	1/ 401 KRS 5:015 & KRS 224.01-400 for spills  2/ 40 CFR Part 100-114; contact US EPA 404-562-8725, or see <a href="http://www.epa.gov.oilspill">http://www.epa.gov.oilspill</a> or Division of Water Field Operations Branch for requirements at 502-564-3410.  3/ Emergency Mgt. Plans required per KRS 39E. See <a href="http://www.kyem.dma.ky.us/sara/kerc">http://www.kyem.dma.ky.us/sara/kerc</a>

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<b>RESEVOIR-SPECIFIC ISSUES (or Internal Nutrient Cycling)</b>	<p>For small water supplies with severe eutrophication, hypolimnetic aeration; whole lake aeration and mixing; chemical inactivation of the bottom sediments;</p> <p>Require watershed reduction of phosphorus inputs from tributaries – see land use practices and recommendation in other sections above and below.</p>	<p>For small water supplies with severe eutrophication, chemical in-lake treatment to reduce algae causing taste and odor problems coupled with activated carbon treatment at the plant to reduce algae and prevent taste and odor problems</p> <p>Ensure watershed reduction of phosphorus inputs from tributaries – see land use practices and recommendation in other sections above and below.</p>	<p>For small water supplies with severe eutrophication or algae problems, chemical in-lake treatment (e.g. blue stone) to reduce algae causing taste and odor problems</p> <p>Encourage watershed reduction of phosphorous inputs from tributaries – see land use practices and recommendation in other sections above and below..</p>	<p>Refer to publications on reservoir management from the North American Lake Management Society's <a href="http://www.nalms.org">http://www.nalms.org</a> website.</p>

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<b>SALT STORAGE SITES</b>	No salt storage areas.	<p>Ensure the installation and maintenance of BMPs to prevent runoff from Salt Storage Sites</p> <p>Annually monitor salt storage areas to ensure that runoff and infiltration is being controlled.</p>	<p>Encourage the installation and maintenance of BMPs to prevent runoff from Salt Storage Sites</p>	<p>Refer to local highway maintenance dept. for appropriate BMPs to control infiltration and surface runoff. USDA-Natural Resources and Conservation Service office (NRCS) can also provide technical assistance on runoff control.</p>
<b>GROWTH AND DEVELOPMENT</b>	No growth and development	<p>Limit growth and development to minimize impervious cover, wastewater, and other pollutant-generating activities (see above)</p> <p>Prepare comprehensive plan and ensure it contains elements to protect source water protection</p> <p>Incorporate protection measures in planning and zoning and coordinate with other branches of local government 1/</p> <p>Adopt:</p> <ul style="list-style-type: none"> <li>- smart growth planning 2/ and</li> <li>- low-impact development principles 3/</li> </ul>	<p>Limit growth and development to minimize impervious cover &amp; other pollutant-generating activities (see above)</p> <p>Prepare comprehensive plan and ensure it contains elements to protect source water protection</p> <p>Incorporate protection measures in planning and zoning and coordinate with other branches of local government 1/</p> <p>Adopt:</p> <ul style="list-style-type: none"> <li>- smart growth planning 2/ and</li> <li>- low-impact development principles 3/</li> </ul>	<p>1/ Planning and zoning statues at <a href="http://www.lrc.state.ky.us/KRS/100-00/CHAPTER.HTM">http://www.lrc.state.ky.us/KRS/100-00/CHAPTER.HTM</a></p> <p>2/ Smart growth at <a href="http://kywatersheds.org/Tools/soft_tools.htm">http://kywatersheds.org/Tools/soft_tools.htm</a></p> <p>3/ Low impact development at <a href="http://www.epa.gov/owow/nps/lid/">www.epa.gov/owow/nps/lid/</a></p>